

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1

6

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 06/20/2014		2. CONTRACT NO. (If any) EP-C-11-038		6. SHIP TO:	
3. ORDER NO. 0020		4. REQUISITION/REFERENCE NO. PR-ORD-14-00878		a. NAME OF CONSIGNEE CPOD	
5. ISSUING OFFICE (Address correspondence to) CPOD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268				b. STREET ADDRESS US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD	
				c. CITY Cincinnati	e. ZIP CODE 45268
7. TO:				f. SHIP VIA	
a. NAME OF CONTRACTOR BATTELLE MEMORIAL INSTITUTE				8. TYPE OF ORDER	
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE REFERENCE YOUR:	
c. STREET ADDRESS 505 KING AVE				<input checked="" type="checkbox"/> b. DELIVERY Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.	
d. CITY COLUMBUS		e. STATE OH	f. ZIP CODE 432012693	Please furnish the following on the terms and conditions specified on both sides of this order and on the attached sheet, if any, including delivery as indicated.	
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE CPOD	
11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOSB PROGRAM <input type="checkbox"/> h. EDWOSB				12. F.O.B. POINT Destination	
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)	
a. INSPECTION Destination	b. ACCEPTANCE Destination			16. DISCOUNT TERMS	

17. SCHEDULE (See reverse for Rejections)

ITEM NO. (a)	SUPPLIES OR SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	Tax ID Number: (b)(4) DUNS Number: Behavior of Solid Material-Bound Chemical and Biological Agents in Thermal Destruction Systems TOPO: Paul Lemieux Continued ...					

18. SHIPPING POINT		19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(h) TOTAL (Cont. pages)
21. MAIL INVOICE TO:						
a. NAME RTP Finance Center						\$50,000.00
b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center Mail Drop D143-02 109 TW Alexander Drive						\$59,519.00
c. CITY Durham				d. STATE NC	e. ZIP CODE 27711	17(i) GRAND TOTAL

22. UNITED STATES OF
AMERICA BY (Signature)

06/20/2014

Camille W. Davis

ELECTRONIC
SIGNATURE

23. NAME (Typed)

Camille W. Davis
TITLE: CONTRACTING/ORDERING OFFICER

ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION

PAGE NO

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IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER

CONTRACT NO.

ORDER NO.

06/20/2014

EP-C-11-038

0020

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0001	Admin Office: CPOD US Environmental Protection Agency 26 West Martin Luther King Drive Mail Code: NWD Cincinnati OH 45268 Accounting Info: 13-14-C-264B000-401F72XPC-2588-26A6A-14264BE 020-001 BFY: 13 EFY: 14 Fund: C Budget Org: 264B000 Program (PRC): 401F72XPC Budget (BOC): 2588 Cost: 26A6A DCN - Line ID: 14264BE020-001 Period of Performance: 06/20/2014 to 04/21/2015 IGF::CL::IGF Behavior of Solid Material-Bound Chemical and Biological Agents in Thermal Destruction Systems Award Type: Cost-plus-fixed-fee Total Estimated Cost: \$(b)(4) Fixed Fee: \$(b)(4) Completion Form				50,000.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$50,000.00

PERFORMANCE WORK STATEMENT
STREAMS II
Task Order 0020, Battelle EP-C-11-038

TITLE: Behavior of Solid Material-Bound Chemical and Biological Agents in Thermal Destruction Systems

Task Order Contracting Officer Representative (TOCOR) Name: Paul Lemieux Office: USEPA ORD/NHSRC/DCMD 109 TW Alexander Drive RTP, NC 27711 Phone: 919-541-0962 Fax: 919-541-0496 Email: Lemieux.Paul@epa.gov	Alternate Task Order Contracting Officer Representative (ATOCOR) Name: Lukas Oudejans Office: USEPA ORD/NHSRC/DCMD 109 T. W. Alexander Drive RTP, NC 27711 Phone: 919-541-2873 Fax: 919-541-0496 Email: Oudejans.Lukas@epa.gov
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PERIOD OF PERFORMANCE: June 20, 2014 through April 21, 2015

PURPOSE OF WORK ASSIGNMENT

The work will gather available information about thermal destruction of chemical and biological agents when bound on solid materials such as building materials.

BACKGROUND

EPA is designated as a coordinating Agency, under the National Response Framework, to prepare for, respond to, and recover from a threat to public health, welfare, or the environment caused by actual or potential oil and hazardous materials incidents. Hazardous materials include chemical, biological, and radiological substances, whether accidentally or intentionally released. EPA is also designated as a support Agency to support the U.S. Department of Agriculture's (USDA's) Animal and Plant Health Inspection Service (APHIS) activities in agricultural emergency response. In addition, EPA is a lead agency under Section 208 of the Food Safety Modernization Act (FSMA), tasked with developing model plans for protecting the nation's food and agricultural infrastructure to safeguard human health and the environment.

Many items removed from contaminated areas either before or after contamination may be treated using incineration or thermal destruction. Whether or not these items have undergone decontamination operations, due to limitations in laboratory capacity, these items may or may not be fully characterized regarding the presence/absence of residual chemical or biological (CB) agent.

Because of this limitation, identifying packaging and incinerator or thermal destructor operating conditions to assure that thermal destruction processes would result in complete destruction of any residual CB agent bound on these items will greatly facilitate the management of the waste generated during cleanup following a CB contamination incident.

This Performance Work Statement (PWS) describes the requirements for addressing an identified gap related to defining conditions under which effective thermal destruction can be performed on solid materials resulting from cleanup following a CB contamination incident.

This work will initially consist of performing a literature search to find available data. It will also consist of assimilating results from incinerator modeling efforts that EPA will supply.

DETAILED TASK DESCRIPTIONS

Task 1 Development of a Quality Assurance Project Plan

The contractor shall comply with all requirements as delineated on the "Quality Assurance Planning Requirements Form (QARF)" included with this extramural action. The contractor shall prepare a QAPP in accordance with <http://www.epa.gov/quality/qs-docs/r5-final.pdf> or based on the type of research that is being conducted. For guidance on preparing a research-specific QAPP, the preparer should refer to the project specific requirements provided in NHSRC's QMP. The QAPP must be approved prior to the start of any data collection and analysis work. Additional information related to QA requirements can be found at www.epa.gov/quality.

Task 1 Deliverable: Draft QAPP to EPA 10 days after TO award. EPA will review the Draft QAPP and provide comments back to Contractor within two (2) weeks. The revised QAPP shall be submitted to EPA for final approval within one (1) month following task order award.

Task 2 Literature Review

The contractor shall identify, collect, evaluate, and summarize available articles, reports, guidance documents, and other pertinent information related to thermal destruction of chemical and biological agents when bound on different types of materials, including, but not limited to concrete, asphalt, brick, wood, ceiling tile, carpet, soil, and other materials found in an urban area. Although primarily directed at thermal incineration, other high temperature processes may be relevant as well, including autoclaves and hot air processes. The contractor will present EPA with the search criteria prior to embarking on the literature search. After the initial search, the Contractor shall submit a preliminary list to EPA so that potential missing literature can be identified. EPA will assist the Contractor if necessary to gain access to chem-demil reports and other sources of information from the Department of Defense. If delays occur due to finding hard-to-locate resources, the other parts of the T.O. will still proceed as scheduled and missing documents will be added to the literature search once they become available.

Task 2 Deliverables:

- 1) Preliminary list of missing documents and other processes via email within 3-4 weeks. EPA will provide feedback within five (5) days.
- 2) The literature review shall be transmitted to the TOCOR in the form of a memo, an Excel file with the list of references and any annotations, and an EndNote library with the relevant fields filled in within two (2) months after QAPP approval. Any missing items identified in Task 2 Deliverable 1 will be added to the completed literature review as

they become available. EPA will provide comments on the literature review, draft memo, spreadsheet, and library within two (2) weeks, and the Contractor shall revise the information to address EPA comments within two (2) weeks following receipt of EPA comments.

Task 3 Report on Thermal Destruction of CB Agents Bound on Materials

The Contractor shall assimilate the information gathered from the literature review, as well as available incinerator modeling results that the EPA has developed (results of modeling to be supplied to Contractor within three (3) months after T.O. award), and write a report suitable for publication as an EPA published report. The report will undergo appropriate EPA internal review processes to make it suitable for publication.

Task 3 Deliverables:

- 1) A draft report shall be delivered to EPA within six (6) months after T.O. award. EPA will provide technical review comments back to the Contractor within three (3) weeks.
- 2) The Contractor shall address those comments and provide a final version of the report two (2) weeks after receiving comments from EPA. The report will undergo the EPA clearance process, and the Contractor shall address comments that arise during the clearance process. It is expected that the report will be completed and cleared within 10 months following award.

**QUALITY ASSURANCE SURVEILLANCE PLAN (QASP)
STREAMS**

Task Order 0020, Battelle EP-C-11-038

TITLE: Behavior of Solid Material-Bound Chemical and Biological Agents in Thermal Destruction Systems

TOCOR: Paul Lemieux

Performance Objective (Task)	Performance Standard (PS)	Surveillance Plan (SP)	Contractor Incentive (CI)	$\frac{\checkmark}{\text{or}} \underline{\text{X}}$
Task 1 Development of a Quality Assurance Project Plan	Contractor provides draft QAPP within 10 days of award and addresses comments for having a final QAPP by the end of the 1 st month after award.	TO-COR will document whether receipt of deliverable is timely. TO-COR will document whether quality of deliverable is at an acceptable level.	TO-COR will address compliance in PPE	X
Task 2 Literature Review	Contractor provides full and complete documentation of the results of the Literature and Market Review completed within two (2) months after QAPP approval.	TO-COR will survey other federal and state agencies and stakeholder groups to ensure all available data has been assembled and included in the deliverable.	TO-COR will address compliance in PPE	X
Task 3 Final Report	Contractor provides draft final report within 6 months after award. The Contractor shall address EPA comments and provide a final version of the report within an additional two (2) weeks after receipt of EPA comments.	TO-COR will document whether receipt of deliverable is timely. TO-COR will document whether quality of deliverable is at an acceptable level.	TO-COR will address compliance in PPE	X